



DART
AEROSPACE

Job Qty:

Das
21
9-89

Status: New

Job Tracking No:

Created By: Marie Lajeunesse

Description:

Note: DWG RBE1X56-122-294 Rev.1 IPP Rev. A 18.12.20 New issue DP Verify DD

Job Routing

Sign-off

JB 19.02.23

18.09.23

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com

www.dataerospace.com

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Date: 02/23/19

Date: 02/23/19

DAS
62
9-89

Plex 1/4/19 7:43 AM Dart.lajeunesse.marie

Entered: _____ Date: _____



WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date : _____	Sequence #: _____	QTY Affected : _____		MRB (QSI042)	
Description Work Order Deviation		Disposition			Completed By
					Lead hand / Supervisor
					QC / QA Coordinator
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐ ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled		FAULT CATEGORY ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
Other/Details:					

				QC 8 - 14	
				QC 8 - 17	
				QC 8 - 20	
				QC 8 - 25	
				QC 8 - 3	
				QC 8 - 32	
				QC 8 - 33	
				QC 8 - 35	
				QC 8 - 38	
				QC 8 - 39	
				QC 8 - 4	
				QC 8 - 44	
				QC 8 - 45	
				QC 8 - 49	
				QC 8 - 58	
				QC 8 - 8	19-02-23
				QC 8 - 9	
				QC 8 - 68	
130	Outsource - 12 - Black Oxide	2 pcs	3/15/19	GRO002-VC	CT 19-2-26
140	Packaging 2-1 - Receive - B4B	2 pcs	3/15/19	0.00 0.00	Packaging 2 - 1 - B4B
					Packaging 2 - 2 - B4B
					Packaging 2 - 3 - B4B
					Packaging 2 - 5 - B4B
					Packaging 2 - 4 - B4B
					Packaging 2 - 6 - B4B
					Packaging 2 - 7 - B4B
					Packaging 2 - 8 - B4B
					Packaging 2 - 9 - B4B
					Packaging 2 - 10 - B4B
					Packaging 2 - 11 - B4B
					Packaging 2 - 12 - B4B
					Packaging 2 - 13 - B4B
					Packaging 2 - 14 - B4B
					Packaging 2 - 15 - B4B
					Packaging 2 - 16 - B4B
					Packaging 2 - 17 - B4B
					Packaging 2 - 18 - B4B
					Packaging 2 - 19 - B4B
					Packaging 2 - 20 - B4B
					Packaging 2 - 21 - B4B
					Packaging 2 - 22 - B4B
					Packaging 2 - 23 - B4B
					Packaging 2 - 24 - B4B
					Packaging 2 - 25 - B4B
					Packaging 2 - 26 - B4B
150	QC 6	2 pcs	3/15/19	0.00 0.00	QC 6 - 38
					QC 6 - 42
					QC 6 - 9
					QC 6 - 68
					QC 6 - 61
					DAS MAR 13 2019 68 9-89
160	Packaging 3-1 - Stock - B4B	2 pcs	3/15/19	0.00 0.00	Packaging 3 - 1 - B4B
					Packaging 3 - 2 - B4B
					Packaging 3 - 3 - B4B
					Packaging 3 - 4 - B4B
					Packaging 3 - 5 - B4B
					Packaging 3 - 6 - B4B
					Packaging 3 - 7 - B4B
					Packaging 3 - 8 - B4B
					Packaging 3 - 9 - B4B
					Packaging 3 - 10 - B4B
					DAS 28 9-89

Entered: _____ Date: _____



WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date : _____	Sequence #: _____	QTY Affected : _____		MRB (QSI042)	
Description Work Order Deviation		Disposition		Completed By	
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				QC / QA Coordinator	
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐ ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled		FAULT CATEGORY ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
Other/Details:					

				Packaging 3 - 11 - B4B Packaging 3 - 12 - B4B Packaging 3 - 13 - B4B Packaging 3 - 14 - B4B Packaging 3 - 15 - B4B Packaging 3 - 16 - B4B Packaging 3 - 17 - B4B Packaging 3 - 18 - B4B Packaging 3 - 19 - B4B Packaging 3 - 20 - B4B Packaging 3 - 21 - B4B Packaging 3 - 22 - B4B Packaging 3 - 23 - B4B Packaging 3 - 24 - B4B Packaging 3 - 25 - B4B Packaging 3 - 26 - B4B	
170 QC 21 - SA	2 pcs	3/15/19	0.00 0.00	QC 21 - SA - 21	DAS 21 MAR 14 2019
Part Op 100 - 1-Machine as per folio FC _____ FOLIO REV: _____ DWG REV: _____ 9-88 2-Debur Descriptions: 120 - Engrave T/N and/or P/N number using MARKTRONIC engraver as per DWG. 130 - -Issue P/O: _____ -Black oxide finish, MIL-C-13924C Class 1 -Apply thin layer of oil/CPC per MIL-PRF-16173 Grade 3 Class 1 or MIL-c-81309 Type III Or MILL-C23411A or MIL-PRF-81309 and wipe off excess. -Material type; 4140 -Certificate of Conformity is required 140 - Certificate of Conformity is required					
Job BOM					
Part / Item	Component Name	Quantity	Operation	Container	
MT-4140QT-R1.625	AISI 4140 Quenched &Tempered Steel Round Bar 1.625" Dia.	1.1600 ft (.58 ea)	100-SL-154 - 1	5116717	
Job Allocations					
Operation	Component Part	Required	Inventory	Allocated	
100-SL-154 - 1	MT-4140QT-R1.625	1	6	0	
MAT009-W					
Part Specifications					
Specifications could not be found.					

Entered: _____ Date: _____



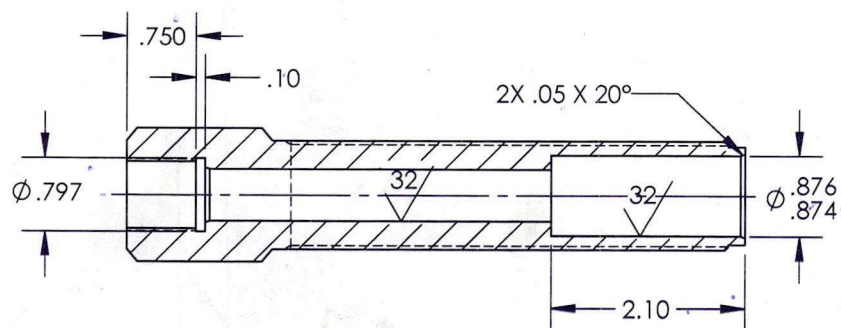
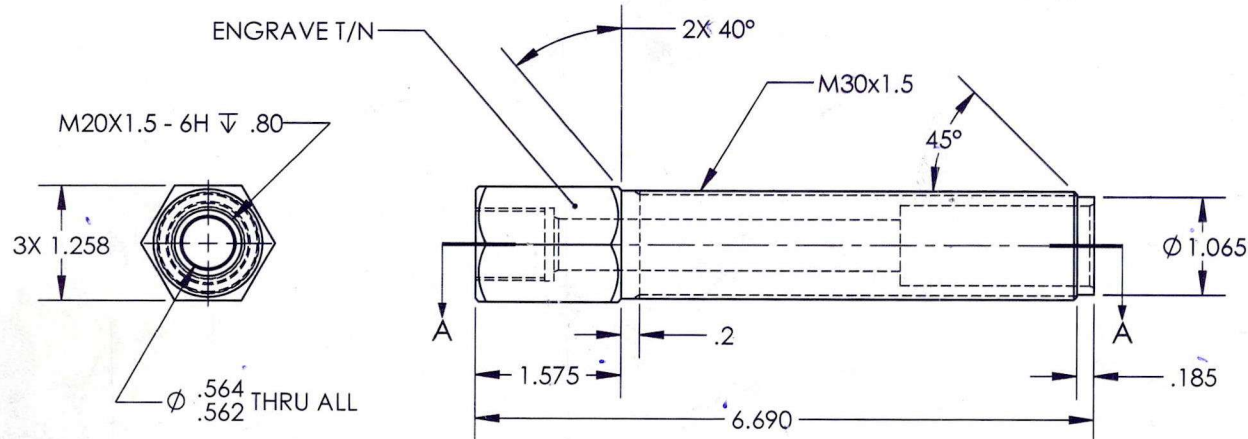
WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

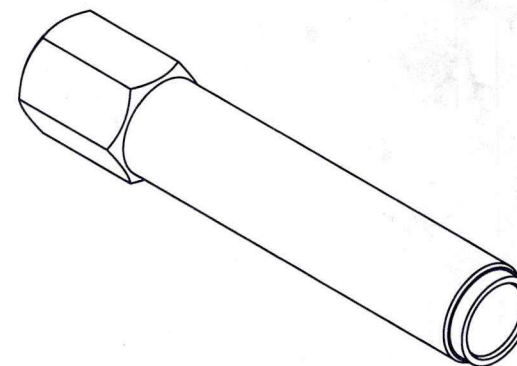
Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
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Description Work Order Deviation			Disposition		
			Completed By		
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Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
Other/Details:					

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1	16-0160	1 CH'D MATERIAL WAS 4140 IS 4140/4142; CH'D DIM WAS Ø.551+0.05/-0.000 THRU ALL IS Ø.564/.562 THRU ALL, WAS Ø.8660/.8655 IS Ø.876/.874, WAS Ø.728 ∇ .80 M20X1.5 - 6H ∇ .70 IS M20X1.5 - 6H ∇ .80; ADDED DIM .750.	10/11/2016	SM	JAG



(-1)

OUTSIDE ROD



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 188147M

FC631



PUSH-OUT DEVICE

TITLE

DWG NO.

RBE1X56-122-294-1

RE

MAT'L 4140/4142

HEAT TREAT HRC 28-34

TREAT	HIRO 20-54
FINISH	BLACK OXIDE

SPEC

SPEC
DRAW

DRAW

CHECKED:

OPPS APPR	
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QA APPR:

APPROVED:

APPROVED: _____

SCALE

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	UNLESS OTHERWISE SPECIFIED
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xxx ± .005 FRACTIONS ± 1/8

.XXX ± .005	FRACTIONS ± 1/8
XY ± .01	ANGLES ± 5°

.XX	$\pm .01$	ANGLES $\pm .5^\circ$
.X	$\pm .1$	SURFACES = 125

1. BREAK ALL SHARP EDGES

.015 x 45° OR .015R

2. DIMENSIONAL LIMITS APPLY AFTER PLATING

3. INTERPRET DIM AND TOL PER

ASME Y14.5M-2009

	USED ON MODEL
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EC135

11/2012	SHEET 2 OF 6
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11/2012	SHEET 2 OF 6
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Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

PO042706



Supplier: GRO002-VC
Group Altech
2455 Halpern
St Laurent
QC
H4S 1N9 Canada
Phone: 514-335-3666
Fax: 514-335-3868

PO No: PO042706
PO Date: 2/26/19
Due Date: 3/5/19
Purchase Order
Revision:
Revision Date:
Ship-To Contact: Tsimiklis, ChrisoulaPhone:

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground
Pynt Terms: Net 60
Freight Terms:
Special Comments:

Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	189242	RBE-350DAMPER	Damper Spanner Wrench -Issue P/O; PO _____ -Black oxide finish, MIL-C-13924C Class 1 -Certificate of Conformity is required	Firmed	-	3/5/19	5 pcs	0 pcs	5 pcs	\$2.35/pcs	\$11.75
2	191018	RBEVR-L11-0010-002-D-1	Rod -Issue P/O; _____ -Black oxide finish, MIL-C-13924C Class 1 -Apply thin layer of oil/CPC per MIL- PRF-16173 Grade 3 Class 1 or MIL-c- 81309 Type III Or MILL-C23411A or MIL-PRF-81309 and wipe off excess. -Material type; 4140 -Certificate of Conformity is required	Firmed	-	3/5/19	4 pcs	0 pcs	4 pcs	\$14.13/pcs	\$56.52



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PURCHASE ORDER PO042706



Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
3	188149	RBE1X56-122-294-5	Threaded Rod -Issue P/O; -Black oxide finish, MIL-C-13924C Class 1 -Apply thin layer of oil/CPC per MIL-PRF-16173 Grade 3 Class 1 or MIL-c-81309 Type III Or MILL-C23411A or MIL-PRF-81309 and wipe off excess. -Material type; 4140 -Certificate of Conformity is required	Firmed	-	3/5/19	6 pcs	0 pcs	6 pcs	\$2.35/pcs	\$14.10
4	190249	RBW6500X01611W142B-3T-1	Plate -Issue P/O; -Black oxide finish, MIL-C-13924C Class 1 -Apply thin layer of oil/CPC per MIL-PRF-16173 Grade 3 Class 1 or MIL-c-81309 Type III Or MILL-C23411A or MIL-PRF-81309 and wipe off excess. -Material type; 1018 -Certificate of Conformity is required	Firmed	-	3/5/19	4 pcs	0 pcs	4 pcs	\$5.71/pcs	\$22.84
5	189454	RBT18565-1	Hex Bit -Issue P/O; -Black oxide finish, MIL-C-13924C Class 1 -Apply thin layer of oil/CPC per MIL-PRF-16173 Grade 3 Class 1 or MIL-c-81309 Type III Or MILL-C23411A or MIL-PRF-81309 and wipe off excess. -Material type; DOM -Certificate of Conformity is required	Firmed	-	3/5/19	10 pcs	0 pcs	10 pcs	\$1.10/pcs	\$11.00

6 X MAR 13 2019

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4 X MAR 13 2019

10 X MAR 13 2019



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PURCHASE ORDER PO042706



Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
6	188147	RBE1X56-122-294-1	Outside Rod -Issue P/O; -Black oxide finish, MIL-C-13924C Class 1 -Apply thin layer of oil/CPC per MIL- PRF-16173 Grade 3 Class 1 or MIL-c- 81309 Type III Or MILL-C23411A or MIL-PRF-81309 and wipe off excess. -Material type; 4140 -Certificate of Conformity is required	Firmed	-	3/5/19	5 pcs	0 pcs	5 pcs	\$4.71/pcs	\$23.55
7	191015	RBEVR-L11-0010-002-B-3	Rod -Issue P/O; -Black oxide finish, MIL-C-13924C Class 1 -Apply thin layer of oil/CPC per MIL- PRF-16173 Grade 3 Class 1 or MIL-c- 81309 Type III Or MILL-C23411A or MIL-PRF-81309 and wipe off excess. -Material type; 1018 -Certificate of Conformity is required	Firmed	-	3/5/19	4 pcs	0 pcs	4 pcs	\$14.13/pcs	\$56.52
Grand Total:											\$196.28



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PURCHASE ORDER PO042706



Order Notes

Procurement Quality Clauses

A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)

A022 Apical Processing
A024 process certifications
A026 certification of material conformance

A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 3/8/19 11:15 AM dart.tsimiklis.chrisoula

Certificat de Conformité / Certificate of Compliance



2455, Rue Halpern | Saint-Laurent | Québec | H4S 1N9
 Tel: 514-335-3666 Fax: 514-335-3868
 www.groupaltech.com



Bon de Livraison / Packing Slip

017229- 1

Livré à / Ship to

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA
 Tel.: 613-632-5200 Fax.:

Client / Customer:

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA
 BUYER:

Date expédition Ship date		Créé Par Generated By	Transport / No de Compte Courier / Acc. No.	Bon de commande Client Customer Purchase Order No.				
06-Mar-2019		Shankar Anand		042706				
#Ligne Line#	No. de Série / # Pièce Part Number /Line Item Details Job # / Ref #	Description pièce(s)	CATG. U/M	Quantités / Quantities				
				Comm. /Ordered	Exp/ Shipped	Qté NC/ NC Qty	Qté Scrap/	À venir/ Back Order
1	RBE-350DAMPER Rev.	RBE-350DAMPER 01 -OXIDE BLACK [OXIDE BLACK] MIL-C-13924C CLASS 1	OXIDE-BLACK CH	5	5	0	0	0
2	RBEVR-L11-0010-002-D-1 Rev.	RBEVR-L11-0010-002-D-1 01 -OXIDE-BLK & OIL [OXIDE BLACK AND OIL] MIL-C-13924C CLASS1 APPLY A THIN LAYER OF OIL WIPE OFF EXCESS OIL	OXIDE-BLACK CH	4	4	0	0	0
3	RBE1X56-122-294-5 Rev.	RBE1X56-122-294-5 01 -OXIDE-BLK & OIL [OXIDE BLACK AND OIL] MIL-C-13924C CLASS 1 APPLY A THIN LAYER OR OIL WIPE OFF EXCESS OIL	OXIDE-BLACK CH	6	6	0	0	0
4	RBW6500X01611W142B-3T-1 Rev.	RBW6500X01611W142B-3T-1 01 -OXIDE-BLK & OIL [OXIDE BLACK AND OIL] MIL-C-13924C CLASS1 APPLY A THIN LAYER WIPE OFF EXCESS OIL	OXIDE-BLACK CH	4	4	0	0	0
5	RBT18565-1 Rev.	RBT18565-1 01 -OXIDE-BLK & OIL [OXIDE BLACK AND OIL] MIL-C-13924C CLASS1 APPLY A THIN LAYER WIPE OFF EXCESS OIL	OXIDE-BLACK CH	10	10	0	0	0
6	RBE1X56-122-294-1 Rev.	RBE1X56-122-294-1 01 -OXIDE-BLK & OIL [OXIDE BLACK AND OIL] MIL-C-13924C CLASS1 APPLY A THIN LAYER WIPE OFF EXCESS OIL	OXIDE-BLACK CH	5	5	0	0	0
7	RBEVR-L11-0010-002-B-3 Rev.	RBEVR-L11-0010-002-B-3 01 -OXIDE-BLK & OIL [OXIDE BLACK AND OIL] MIL-C-13924C CLASS1 APPLY A THIN LAYER WIPE OFF EXCESS OIL	OXIDE-BLACK CH	4	4	0	0	0

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BUYER:

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